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## Notes on the Nearctic Geosarginae (Diptora: Stratiomyiidae).

By Maurice T. James, Colorado State College, Fort Collins.
In a previous paper ${ }^{1}$ I published an account of the Nearctic Geosarginae which, in the light of further study and with the accumulation of additional information, is in need of revision. The present paper attempts to bring this review up to date. Revised Key to the Genera.

1. Scutellum spined-Nothomyia (belongs to Stratiomyinae). Scutellum unspined (Geosarginae)2
2. Second segment of antennae produced into third in a fingerlike process, especially visible on inner side, Ptecticus
[^0]Second segment of antennae sometimes convex, but not produced into a finger-like process.................. 3
3. Eyes densely and conspicuously pilose........Chloromyia

Eyes bare .............................................. . . 4
4. Anterior ocellus remote from other two by a distance much greater than length of base of ocellar triangle (except in $G$. perpulcher) ; distance from $r-m$ to origin of $\mathrm{R}_{2+3}$ greater than length of $\mathrm{r}-\mathrm{m} . \ldots . \mathrm{I}_{\text {. . . . Gcosargus }}$
Ocelli approximately equidistant from each other..... 5
5. Abdomen relatively short and broad, much wider than thorax and (excluding segment five) no longer than broad; eyes of male contiguous, divided into definite zones of different sized facets; distance from r-m to origin of $\mathrm{R}_{2+3}$ greater than length of $\mathrm{r}-\mathrm{m}$. . . . . . . . . . 6
Abdomen barely, if any, wider than thorax, and two to three times as long as wide; eyes in both sexes separated and not divided into zones of different sized facets; origin of $\mathrm{R}_{2+3}$, in American species known to me, before, at, or but slightly beyond r-m.......... 7
6. Discal cell small; posterior veins weak, evanescent toward wing margin; anal cell as broad as combined basal cells .................................... Microchrysa
Discal cell of usual size ; posterior veins evident to wing margin ; discal cell wider than basal cells individually, about two-thirds their combined width,

Cephatochrysa ${ }^{2}$
7. Lower squama with a strap-like projection (Neotropical and Old World) ........................Chrysochroma
Lower squama without such a projection (Nearctic and Neotropical) ...........................Merosargus
Ptecticus trivittatus melanopus, ssp. nov.
In all respects a typical $P$. trivittatus, except that the tarsi and the apical two-thirds of the hind tibiae are black, the front and middle tibiae are blackish anteriorly on the apical twofifths; and each antenna bears on the immer side of the third segment a pair of black spots, one near the base of the arista, the other at the opposite apical corner.

[^1]Holotype, ô. Columbus, Onio, Sept. 1, 1939 (J. Enke) Ohio State University collection.

Chloromyla formosa Scopoli. Two males, Rochester, New York, July 16, 1939 (Amer. Mus. Nat. Hist.). This is the first record in America of this common Palaearctic species. Geosargus lucens Loew.

Sargus lucons Loew, 1866, Cent., VII, 11 ( © ) .
Sargus tricolor Loew, 1866, Cent., VII, 12. ( $~$ ) ).
Macrosargus clavis Williston, 1895, Canad. Ent., 17: 123 ( $\begin{gathered}0 ;\end{gathered}$ ) .
A widely distributed and somewhat variable species. I have seen a female from Clarksville, Tennessee, which agrees with the form described as tricolor, but I believe this is merely a color variation.

Microchrysa polita L. and M. flavicornis Meig. are both widely distributed throughout the United States, but evidently neither is of common occurrence.

Cephalochrysa Kertész. To this genus belong the four species which in my previous paper I assigned to Isosargus.

Merosargus caerulifrons Johnson. This species, formerly placed in Gcosargus, is a true Merosargus.
Merosargus beameri, n. sp.
ô. Head black, with a green cast, especially on the face; the vertex, post-vertical area, and middle of front as far as the frontal calli, however, metallic green; frontal calli ivory white, stubinterrupted; black areas of front densely punctured. Front broadest below; ratio of vertex on posterior margin, front anterior to unpaired ocellus, and front at calli, 11:9:11. Pile on upper part of front black and brownish-yellow intermixed, on lower part of front and face short, black; on cheeks, longer, yellow. Antennae brownish-yellow, their pile black; arista at base somewhat more blackish, thickened, and black-haired; segments sule $q u a l$ in length.

Thorax, except a slender notopleural margin, wholly metallic green, the dorsum, however. especially hehind the suture and on the scutellum and metascutellum with a decided violet cast; dorsum with short, inconspicuous, erect, black pile and with longer, rather conspicuous, appressed yellow pile ; pile elscwhere white, except on the metanotal slopes, where there is some long black pile intermixed with the more abundant white.

Legs yellow, except the last two or three segments of the front and hind tarsi, the apical three-fifths of the hind tibiae, and the apical three-fourths of the hind femora (especially above) ; pile in general black on black areas and also on apical segments of middle tarsi, otherwise yellow.

Halteres yellow, somewhat darkened on knob. Wings hyaline; veins brown, almost black in places; $\mathrm{R}_{2+3}$ arising slightly beyond $\mathrm{r}-\mathrm{m}$, converging somewhat toward $\mathrm{R}_{1}$ but ending independently' of it.

Abdomen widening gradually to apex of fourth segment; length almost three times maximum width; color metallic green with violet reflections, unmarked with yellow except narrow base of second and narrow apex of fourth segments of venter, and genitalia, the latter wholly bright yellow; pile short, black, inconspicuous; the basal three segments, and to a much less extent the fourth and base of the fifth segments, have. in addition, on the sides of the terga a long, pale yellow pile which greatly obscures the black. Length, 8.5 mm .

Holouype, ô, Baboquivari Mountains, Arizona, July 19, 1932 (R. H. Beamer). Snow Entomological Collection, University of Kansas.

Runs in Curran's key (Amer. Mus. Nov., 534, p. 1-2) to cingulatus Schiner; but the lack of extensive yellow markings will readily distinguish it from cingulatus, the described Mexican species not included in Curran's key, and, indeed, from most other described species of the genus. M. cacrulifrons, which also has the unicolorous abdomen, may at once be distinguished by its yellow pleura.

## Henry Clinton Fall Memorial Publication Fund.

The Pacific Coast Entomological Society has recently received a gift of securities valued at $\$ 1000$. from the estate of the late H. C. Fall, to be known as the Henry Clinton Fall Memorial Publication Fund, according to the January issue of the PanPacific Entomologist.


[^0]:    ${ }^{1}$ Canad. Ent., 47, pp. 267-275, 1935.

[^1]:    ${ }^{2}$ See Ent. News, 50, p. 218, 1939.

